

Message

From: Pantuck, Kenneth [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=43064A1F5B8642D2A062C410540B8362-KPANTUCK]
Sent: 2/24/2021 12:42:44 PM
To: Peter Thomas [pthomas@manuregy.com]
Subject: FW: Efficiency of a wood chip biofilter

FYI

Air will respond to you.

Ken

From: Fernandez, Cristina <Fernandez.Cristina@epa.gov>
Sent: Tuesday, February 23, 2021 4:06 PM
To: Pantuck, Kenneth <Pantuck.Kenneth@epa.gov>; Boylan, Jeff <Boylan.Jeffrey@epa.gov>
Cc: Opila, MaryCate <Opila.MaryCate@epa.gov>
Subject: RE: Efficiency of a wood chip biofilter

OK, thanks for talking to Peter Thomas. We will take it from here.

Cristina Fernandez, Director
Air & Radiation Division (3AD00)
U. S. Environmental Protection Agency, Region 3
1650 Arch Street
Philadelphia, PA 19103-2023
Work: (215) 814-2178
Cell: (215) 375-0847

From: Pantuck, Kenneth <Pantuck.Kenneth@epa.gov>
Sent: Tuesday, February 23, 2021 3:02 PM
To: Boylan, Jeff <Boylan.Jeffrey@epa.gov>; Fernandez, Cristina <Fernandez.Cristina@epa.gov>
Subject: RE: Efficiency of a wood chip biofilter

Hi Jeff and Cristina,

I spoke to Peter Thomas today.

I've known Peter for about six years.

I told him that what he was attempting to do was unique – running stack emissions through a biofilter (consisting of wood chips and wood biochar) to further reduce various pollutants.

He contacted Air because it is an air issue, not a biochar issue although biochar will be produced as an end product.

He wanted Air's approval of concept or exemption citing past EPA letters EPA exempting similar gasification proposals from CISWI.

He intends to gasify poultry litter on the Eastern Shore which is a significant cause of P runoff into the Chesapeake Bay.

This gasification process will change a soluble P material into a bound mineralized carbon material.

It is strictly limited to ag operations.

He will make available to us any results that may come about from their emissions testing.

Thanks,

Ken

Kenneth Pantuck
Senior Environmental Scientist
Innovative Technologies Practice Leader

U.S. Environmental Protection Agency
Water Division (3WD32)
State Assistance & Partnerships Branch
Infrastructure and Assistance Section
1650 Arch Street
Philadelphia, PA 19103

tel: (215) 814-5769

e-mail: Pantuck.Kenneth@epa.gov

From: Boylan, Jeff <Boylan.Jeffrey@epa.gov>
Sent: Tuesday, February 23, 2021 1:44 PM
To: Pantuck, Kenneth <Pantuck.Kenneth@epa.gov>
Subject: FW: Efficiency of a wood chip biofilter

Hi Ken,

Here is the request that came into the Air & Radiation Division. I highlighted the specific request below.

Jeffrey M. Boylan, Chief
Infrastructure & Assistance Section (3WD32)
State Assistance & Partnerships Branch
Water Division
USEPA Region III
1650 Arch Street
Philadelphia, PA 19103
(215) 814-2094
Email: boylan.jeffrey@epa.gov

From: Fernandez, Cristina <Fernandez.Cristina@epa.gov>
Sent: Monday, February 22, 2021 3:55 PM
To: pthomas@manuregy.com
Cc: Pantuck, Kenneth <Pantuck.Kenneth@epa.gov>; Boylan, Jeff <Boylan.Jeffrey@epa.gov>
Subject: FW: Efficiency of a wood chip biofilter

Hi Peter,

The EPA, Region 3 contact is Ken Pantuck. He is out today. If you need immediate assistance you can contact his supervisor, Jeff Boylan.

Thanks, Cristina

Cristina Fernandez, Director
Air & Radiation Division (3AD00)
U. S. Environmental Protection Agency, Region 3
1650 Arch Street
Philadelphia, PA 19103-2023
Work: (215) 814-2178
Cell: (215) 375-0847

From: pthomas@manuregy.com <pthomas@manuregy.com>
Sent: Friday, February 19, 2021 3:53 PM
To: Fernandez, Cristina <Fernandez.Cristina@epa.gov>
Subject: Efficiency of a wood chip biofilter

Cristina,

We are planning to install a regional-scale animal waste gasification on the Delmarva Peninsula for drying and processing approximately 30,000 tons of broiler litter per year. The Earthcare manure gasification system complies with both NRCS Conservation Practice Code 735 ("Waste Gasification Facilities" – attached), as well as the EPA Region 3 Chesapeake Bay Program's agricultural Best Management Practice MTT4 entitled "High Temperature Gasification" (attached). On August 17, 2017 and July 17, 2018 you formally ruled that our manure gasification system is not an incinerator, and that it complies with Section 112 of the U.S. EPA Clean Air Act ("Non-Hazardous Secondary Materials"), regardless of which organic agricultural or municipal biomass is being processed (see attached).

To date, we have not been required to install any air emissions or odor control equipment, but we plan to do so in all of our future installations. Attached is a Process Flow Chart of our manure gasification system, with the multi-stage emissions control equipment that we plan to install on the outside of the building (shown in blue). Next week, we are going to measure NOx, SOx, CO, CO₂ and VOC emissions at our one of our manure gasification systems here in the U.S., but since every biofilter appears to be custom-designed, we are trying to estimate the emissions reductions we can expect to achieve by using a chemical scrubber followed by a very large wood chip / microbe biofilter.

Can you suggest a contact at a municipal or industrial wastewater treatment plant in Region 3 who is utilizing an incinerator (preferably to incinerate biosolids), followed by a chemical tower and a wood-chip biofilter?

Regards,

Peter Thomas
Earthcare, LLC (formerly Coaltec Energy USA, Inc.)
434-989-1417 (Cell)
www.earthcarellc.com